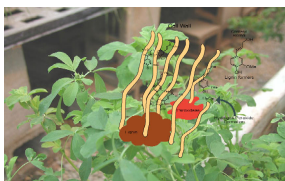




Improve on farm nutrient management

A computer model for dairy forage systems simulates alfalfa and corn growth, harvest, storage and feeding on dairy farms as well as manure production, nutrient losses, manure handling, tillage and crop planting over many years using past weather data for the region. Another focus of the group is evaluating Phosphorus and Nitrate management to aid farmers in complying with environmental regulations. Group members include:

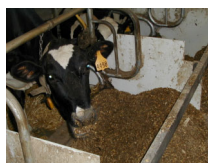
Larry Satter, Research Dairy Scientist
John Grabber, Research Agronomist
Paul Weimer, Research Microbiologist



Cell Wall factors limiting digestibility and forage utilization in sustainable dairy farming

The Cell Wall Group focuses on determining factors that limit forage cell wall digestibility and developing strategies to improve cell wall utilization by dairy cows. Group members include:

Ronald Hatfield, Research Plant Physiologist
David Mertens, Research Dairy Scientist
John Ralph, Research Chemist
Paul Weimer, Research Microbiologist
John Grabber, Agronomist
Hans Jung, Animal Nutritionist



Improving efficiency of Nitrogen utilization in dairy production

Research done by this group focuses on obtaining a better understanding of the factors influencing efficient utilization of protein by dairy cows in order to decrease the need for protein supplementation and nitrogen losses to the environment. Group members include:

Glen Broderick, Research Dairy Scientist
Richard Muck, Research Agricultural Engineer
Larry Satter, Research Dairy Scientist
Richard Smith, Research Geneticist
James Russell, Research Microbiologist
Ronald Hatfield, Research Plant Physiologist
Richard Koegel, Research Agricultural Engineer



US Dairy Forage Research Center (Established 1981)

The Mission of the U.S. Dairy Forage Research Center is to solve problems that are national in scope which limit effective and efficient use of forage for the production of milk. The Center coordinates research involving engineers, microbiologists, chemists, and plant and animal scientists at locations in 3 states. Our goal is to develop knowledge and tools needed to enhance sustainable and competitive dairy forage systems that protect the environment, promote animal health, and ensure a safe, healthy food supply. To achieve these goals our staff is focused on the following areas of research:

- Improvement of quality and yield of forages grown on the farm
- Reduction of losses during harvest, storage, and feeding
- Maximization of efficient utilization of forage nutrients
- Improvement of on farm nutrient management
- Development of value added products



US DFRC Research Farm

The research farm is an integral part of the research work done at the Dairy Forage Center. The 1400 acre farm is beautifully located near the Wisconsin river in Prairie du Sac. There are 1100 acres in harvested land and 300 acres of pasture to provide for the 650 cows in the herd. Our feeding trials, crop yield studies, crop variety tests, grazing projects, and nutrient management research could not be achieved without the efforts of those at the farm. The management staff at the farm is composed of:

Richard Walgenbach, Farm Manager
Len Strozinski, Herd Manager

Please take the opportunity to visit our Farm Facility tomorrow starting at 10:00 am. There will be tours and demonstrations of research techniques used in past and current projects.



Using Site-Specific Estimates of Feed Nutritive Value to Improve Dairy Farm Efficiency

Excessive and inefficient use of feeds on dairy farms can lead to unsustainable systems that are unprofitable and contaminate the environment with wasted nutrients. This group focuses on developing new methods for rapid analysis of nutrient availability in dairy cattle to account for differences in composition and processing of wet forages and other feeds. Group members include:

David Mertens, Research Dairy Scientist
Richard Muck, Research Agricultural Engineer
Glen Broderick, Research Dairy Scientist
Mike Russelle, Soil Scientist
John Grabber, Research Agronomist



Value added products from perennial legumes

Activities of this group include development of improved methods for forage harvesting and preservation as well as development of new products from forages or forage waste materials. Collaborative work in this group includes working closely with the Biological Systems Engineering Department at the University of Wisconsin-Madison. Members of this group include:

Richard Koegel, Research Agricultural Engineer
Richard Muck, Research Agricultural Engineer
Paul Weimer, Research Microbiologist

